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12

13 UNITED STATES DISTRICT COURT  
14 FOR THE NORTHERN DISTRICT OF CALIFORNIA  
15 SAN JOSE DIVISION

16 SPACE DATA CORPORATION,

17 Plaintiff,

18 v.

19 ALPHABET INC., GOOGLE LLC, and  
20 LOON LLC

21 Defendants.  
22  
23  
24  
25  
26  
27

Case No. 5:16-cv-03260-BLF

**PLAINTIFF SPACE DATA  
CORPORATION'S ANSWER AND  
AFFIRMATIVE DEFENSES TO  
DEFENDANTS ALPHABET INC.,  
GOOGLE LLC, AND LOON LLC'S  
COUNTERCLAIMS TO SPACE  
DATA CORPORATION'S FOURTH  
AMENDED COMPLAINT**

Judge: Hon. Beth Labson Freeman  
Date Filed: June 13, 2016  
Trial Date: August 5, 2019

**JURY TRIAL DEMANDED**

28 PLAINTIFF SPACE DATA CORPORATION'S  
ANSWER AND AFFIRMATIVE DEFENSES  
TO DEFENDANTS' COUNTERCLAIMS

Case No. 5:16-cv 03260-BLF (NC)

**ALPHABET INC., GOOGLE LLC, AND LOON LLC's COUNTERCLAIMS**

1. Space Data sets forth by reference paragraphs 1 through 405 of its Fourth Amended Complaint in their entirety as if fully set forth herein. No response to Google's Affirmative Defenses is required.

**NATURE OF THE ACTION**

2. Space Data admits that Google purports to seek "an order declaring that Google does not infringe any valid claim of the '941, '503, '706, or '193" Patents but denies that Google is entitled to such an order. The remaining allegations in this paragraph are legal conclusions to which no response is required.

**THE PARTIES**

3. Space Data admits that Alphabet Inc. is a Delaware corporation with its principal place of business at 1600 Amphitheatre Parkway, Mountain View, California 94043-1351.

4. Space Data admits that Google LLC is a Delaware limited liability company with its principal place of business at 1600 Amphitheatre Parkway, Mountain View, California 94043-1351.

5. Space Data admits that Loon LLC is a Delaware limited liability company, with its principal place of business at 1600 Amphitheatre Parkway, Mountain View, California 94043-1351.

6. Space Data admits that it is an Arizona corporation with its principal place of business at 2535 W. Fairview Street, Suite 101, Chandler, Arizona 85224-4707.

**JURISDICTION AND VENUE**

7. Space Data admits that Google purports to bring its claims for declaratory relief under Title 35 of the United States Code. Space Data further admits that this Court has subject matter jurisdiction over certain patent infringement and invalidity counterclaims under 28 U.S.C. §§ 1331, 1338, 2201, and 2202. Space Data denies any remaining allegations of this paragraph.

1       8. Space Data admits it is prosecuting its Complaint against Google in this Court.  
2 Space Data admits that the parties have a December 1, 2007 Mutual Confidentiality and  
3 Nondisclosure Agreement. Space Data denies any remaining allegations in this paragraph.

4       9. The allegations in this paragraph are legal conclusions to which no response is  
5 required. To the extent a response is required, Space Data denies the allegations.

6                   **FACTS COMMON TO ALL COUNTS**

7       10. Space Data admits it filed the underlying action against Google alleging, among  
8 other things, that Space Data is the owner of the '941, '503, '706, and '193 patents and that  
9 Google has infringed and is currently infringing the claims of the '941, '503, '706, and '193  
10 Patents listed in Space Data's Election of Asserted Claims. Space Data denies any remaining  
11 allegations in this paragraph.

12       11. Space Data admits that Google has denied its claims of patent infringement and that  
13 Google avers that certain of the claims of the '941, '503, '706, and '193 Patents are invalid.  
14 Space Data denies any remaining allegations in this paragraph.

15       12. Space Data admits that there exists a substantial and actual controversy between  
16 Google and Space Data with respect to infringement and invalidity of the claims of the '941,  
17 '503, '706, and '193 Patents listed in Space Data's Election of Asserted Claims. Space Data  
18 denies that there exists a substantial and actual controversy between Google and Space Data  
19 with respect to infringement or invalidity of any other claims of the '941, '193, '503, and  
20 '706 Patents. The remaining allegations in this paragraph are legal conclusions to which no  
21 response is required. To the extent a response is required, Space Data denies the remaining  
22 allegations in this paragraph.

23                   **COUNTERCLAIM 1: DECLARATORY JUDGMENT OF**  
24                   **NON-INFRINGEMENT OF U.S. PATENT NO. 6,628,941**

25       13. Space Data incorporates by reference its responses to the allegations of paragraphs  
26 1 through 12 above as its response to this paragraph.

1 14. Space Data denies the allegations in this paragraph.

2 15. Space Data denies the allegations in this paragraph.

3 16. Space Data denies the allegations in this paragraph.

4 17. Space Data admits there exists an actual, continuing, justiciable case or controversy  
5 between Google and Space Data as to whether the claims of the '941 Patent listed in Space  
6 Data's Election of Asserted Claims are infringed by Google. Space Data denies that there  
7 exists an actual, continuing, justiciable case or controversy between Google and Space Data  
8 with respect to any other claims of the '941 Patent. Space Data denies any remaining  
9 allegations in this paragraph.

10 18. Space Data denies the allegations in this paragraph.

11 **COUNTERCLAIM 2: DECLARATORY JUDGMENT OF**  
12 **INVALIDITY OF U.S. PATENT NO. 6,628,941**

13 19. Space Data incorporates by reference its responses to the allegations of paragraphs  
14 1 through 18 above as its responses to this paragraph.

15 20. Space Data denies the allegations in this paragraph.

16 21. Space Data admits that it did not invent the idea of using high-altitude balloons for  
17 purposes of communication. Space Data denies that any patents, patent applications, and  
18 other references, individually and/or in combination, disclose the asserted claims of the '941  
19 Patent. Space Data denies that the asserted claims of the '941 Patent are anticipated and/or  
20 rendered obvious by Campbell, Lanzerotti, Ibanez-Meier, Seligsohn I, Tuval, Gover, Wong,  
21 Ayyagari, Struble, Carten, Raven Report, Cirrus Report, and Djuknic. Space Data denies  
22 that Exhibit A demonstrates that each of these references anticipates and/or renders obvious,  
23 alone or in combination with any one of the other references, the asserted claims of the '941  
24 Patent. The remaining allegations of this paragraph are legal conclusions to which no  
25 response is required. To the extent a response is required, Space Data denies the remaining  
26 allegations.

1       22. Space Data denies the allegations in this paragraph.

2       23. Space Data denies that the '941 Patent is invalid under 35 U.S.C. § 112. Space  
3 Data denies that a person of ordinary skill in the art would not have understood Space Data to  
4 be in possession of the claimed invention, would not have been able to make use of the  
5 alleged invention without undue experimentation, and would not have understood what the  
6 claims mean. Space Data admits that certain claims of the '941 Patent include a limitation  
7 stating "free floating without any longitudinal and latitudinal position control." Space Data  
8 denies that the '941 Patent contains a negative limitation that is not adequately supported by  
9 the specification. Space Data denies any remaining allegations in this paragraph.

10       24. Space Data admits that certain claims of the '941 Patent use the phrase "wherein  
11 said at least one of said communications devices is capable of handing off communication  
12 with said first platform to said second platform as said first platform moves out of a  
13 communication range of said at least one of said communications devices." Space Data  
14 denies that the '941 Patent does not adequately explain how such communications devices  
15 would hand off communication from one balloon to another. Space Data denies that the  
16 specification of the '941 Patent does not adequately describe the criteria for determining  
17 when to perform hand off. Space Data denies that failure to adequately describe how  
18 communications devices would hand off communication from one balloon to another or the  
19 criteria for determining when to perform hand off would render the claims of the '941 Patent  
20 invalid for lack of written description and/or enablement. Space Data denies that any claims  
21 of the '941 Patent fail for lack of written description and/or enablement. Space Data denies  
22 any remaining allegations in this paragraph.

23       25. Space Data denies the allegations in this paragraph.

24       26. Space Data denies the allegations in this paragraph.

25       27. Space Data admits there exists an actual, continuing, justiciable case or controversy  
26 between Google and Space Data as to whether the claims of the '941 Patent listed in Space  
27

1 Data's Election of Asserted Claims are valid. Space Data denies that there exists an actual,  
 2 continuing, justiciable case or controversy between Google and Space Data with respect to  
 3 the validity of any other claims of the '941 Patent. Space Data denies that there exists an  
 4 actual, continuing, justiciable case or controversy between Space Data and Google as to the  
 5 enforceability of any claims of the '941 Patent. Space Data denies any remaining allegations  
 6 in this paragraph.

7 28. Space Data denies the allegations in this paragraph.

8 **COUNTERCLAIM 3: DECLARATORY JUDGMENT OF**  
 9 **NON-INFRINGEMENT OF U.S. PATENT NO. 9,632,503**

10 29. Space Data incorporates by reference its responses to the allegations of paragraphs  
 11 1 through 28 above as its responses to this paragraph.

12 30. Space Data denies the allegations in this paragraph.

13 31. Space Data denies the allegations in this paragraph.

14 32. Space Data denies the allegations in this paragraph.

15 33. Space Data admits there exists an actual, continuing, justiciable case or controversy  
 16 between Google and Space Data as to whether the claims of the '503 Patent listed in Space  
 17 Data's Election of Asserted Claims are infringed by Google. Space Data denies that there  
 18 exists an actual, continuing, justiciable case or controversy between Google and Space Data  
 19 with respect to any other claims of the '503 Patent. Space Data denies any remaining  
 20 allegations in this paragraph.

21 34. Space Data denies the allegations in this paragraph.

22 **COUNTERCLAIM 4: DECLARATORY JUDGMENT OF**  
 23 **INVALIDITY OF U.S. PATENT NO. 9,632,503**

24 35. Space Data incorporates by reference its responses to the allegations of paragraphs  
 25 1 through 34 above as its responses to this paragraph.

26 36. Space Data denies the allegations in this paragraph.

1        37. Space Data admits that it did not invent the idea of using high-altitude balloons for  
2 purposes of communication. Space Data denies that any patents, patent applications, and  
3 other references, individually and/or in combination, disclose the asserted claims of the '503  
4 Patent. Space Data denies that the asserted claims of the '503 Patent are anticipated and/or  
5 rendered obvious by Knoblach, Campbell, Flickinger, Campbell '248, Seligsohn I, GAINS  
6 Instrumentation, Chocol, ICAO, FAA 101, Anderson, Holder, Jumper, and Smith. Space  
7 Data denies that Knoblach, Campbell, Flickinger, Campbell '248, Seligsohn I, GAINS  
8 Instrumentation, Chocol, ICAO, FAA 101, Anderson, Holder, Jumper, and Smith disclose  
9 "balloon communications system as well as the balloon components and flight-termination  
10 devices claimed by the '503" Patent. Space Data denies that Exhibit B demonstrates that  
11 each of these references anticipates and/or renders obvious, alone or in combination with any  
12 one of the other references, the asserted claims of the '503 Patent. The remaining allegations  
13 of this paragraph are legal conclusions to which no response is required. To the extent a  
14 response is required, Space Data denies the remaining allegations.

15        38. The allegations of this paragraph set forth speculation, argument, and legal  
16 conclusions to which no response is required. To the extent a response is required, Space  
17 Data denies the allegations in this paragraph.

18        39. Space Data denies that the '503 Patent is invalid under 35 U.S.C. § 112. Space  
19 Data denies that any of the claims of the '503 Patent are invalid as indefinite because of lack  
20 of antecedent basis. Space Data admits that independent claims 1, 6, and 15 of the '503  
21 patent each have an element stating "wherein at least one of the geographical coordinates  
22 tracking system comprises a GPS." Space Data denies that this element lacks intelligible  
23 meaning. The remaining allegations of this paragraph are legal conclusions to which no  
24 response is required. To the extent a response is required, Space Data denies the remaining  
25 allegations.

1       40. The allegations of this paragraph set forth argument and legal conclusions to which  
2 no response is required. To the extent a response is required, Space Data denies the  
3 allegations of this paragraph.

4       41. Space Data admits there exists an actual, continuing, justiciable case or controversy  
5 between Google and Space Data as to whether the claims of the '503 Patent listed in Space  
6 Data's Election of Asserted Claims are valid. Space Data denies that there exists an actual,  
7 continuing, justiciable case or controversy between Google and Space Data with respect to  
8 the validity of any other claims of the '503 Patent. Space Data denies that there exists an  
9 actual, continuing, justiciable case or controversy between Space Data and Google as to the  
10 enforceability of any claims of the '503 Patent. Space Data denies any remaining allegations  
11 in this paragraph.

12       42. Space Data denies the allegations in this paragraph.

13                   **COUNTERCLAIM 5: DECLARATORY JUDGMENT OF**  
14                   **NON-INFRINGEMENT OF U.S. PATENT NO. 9,643,706**

15       43. Space Data incorporates by reference its responses to the allegations of paragraphs  
16 1 through 42 above as its responses to this paragraph.

17       44. Space Data denies the allegations in this paragraph.

18       45. Space Data denies the allegations in this paragraph.

19       46. Space Data denies the allegations in this paragraph.

20       47. Space Data admits there exists an actual, continuing, justiciable case or controversy  
21 between Google and Space Data as to whether the claims of the '706 Patent listed in Space  
22 Data's Election of Asserted Claims are infringed by Google. Space Data denies that there  
23 exists an actual, continuing, justiciable case or controversy between Google and Space Data  
24 with respect to any other claims of the '706 Patent. Space Data denies any remaining  
25 allegations in this paragraph.

26       48. Space Data denies the allegations in this paragraph.



**COUNTERCLAIM 6: DECLARATORY JUDGMENT OF**  
**INVALIDITY OF U.S. PATENT NO. 9,643,706**

49. Space Data incorporates by reference its responses to the allegations of paragraphs 1 through 48 above as its responses to this paragraph.

50. Space Data denies the allegations in this paragraph.

51. Space Data admits that it did not invent the idea of using high-altitude balloons for purposes of communication. Space Data denies that any patents, patent applications, and other references, individually and/or in combination, disclose the asserted claims of the '706 Patent. Space Data denies that the asserted claims of the '706 Patent are anticipated and/or rendered obvious by Knoblach, Campbell, Flickinger, Campbell '248, Seligsohn I, GAINS Instrumentation, Chocol, ICAO, FAA 101, Anderson, Holder, Jumper, and Smith. Space Data denies that Knoblach, Campbell, Flickinger, Campbell '248, Seligsohn I, GAINS Instrumentation, Chocol, ICAO, FAA 101, Anderson, Holder, Jumper, and Smith disclose "balloon communications system as well as the balloon components and flight-termination devices claimed by the '706" Patent. Space Data denies that Exhibit B demonstrates that each of these references anticipates and/or renders obvious, alone or in combination with any one of the other references, the asserted claims of the '706 Patent. The remaining allegations of this paragraph are legal conclusions to which no response is required. To the extent a response is required, Space Data denies the remaining allegations.

52. The allegations of this paragraph set forth speculation, argument, and legal conclusions to which no response is required. To the extent a response is required, Space Data denies the allegations in this paragraph.

53. Space Data denies that the '706 Patent is invalid under 35 U.S.C. § 112. Space Data denies that any of the claims of the '706 Patent, including Claim 29 thereof, are invalid as indefinite because of lack of antecedent basis. Space Data admits that claim 29 of the '706 patent has an element stating "wherein at least one of the geographical coordinates tracking

1 system comprises a GPS.” The remaining allegations of this paragraph are legal conclusions  
 2 to which no response is required. To the extent a response is required, Space Data denies the  
 3 remaining allegations.

4 54. The allegations of this paragraph set forth argument and legal conclusions to which  
 5 no response is required. To the extent a response is required, Space Data denies the  
 6 allegations of this paragraph.

7 55. Space Data admits there exists an actual, continuing, justiciable case or controversy  
 8 between Google and Space Data as to whether the claims of the ’706 Patent listed in Space  
 9 Data’s Election of Asserted Claims are valid. Space Data denies that there exists an actual,  
 10 continuing, justiciable case or controversy between Google and Space Data with respect to  
 11 the validity of any other claims of the ’706 Patent. Space Data denies that there exists an  
 12 actual, continuing, justiciable case or controversy between Space Data and Google as to the  
 13 enforceability of any claims of the ’706 Patent. Space Data denies any remaining allegations  
 14 in this paragraph.

15 56. Space Data denies the allegations in this paragraph.

16 **COUNTERCLAIM 7: DECLARATORY JUDGMENT OF**  
 17 **NON-INFRINGEMENT OF U.S. PATENT NO. 9,678,193**

18 57. Space Data incorporates by reference its responses to the allegations of paragraphs  
 19 1 through 56 above as its responses to this paragraph.

20 58. Space Data denies the allegations in this paragraph.

21 59. Space Data denies the allegations in this paragraph.

22 60. Space Data denies the allegations in this paragraph.

23 61. Space Data admits there exists an actual, continuing, justiciable case or controversy  
 24 between Google and Space Data as to whether the claims of the ’193 Patent listed in Space  
 25 Data’s Election of Asserted Claims are infringed by Google. Space Data denies that there  
 26 exists an actual, continuing, justiciable case or controversy between Google and Space Data  
 27

1 with respect to any other claims of the '193 Patent. Space Data denies any remaining  
2 allegations in this paragraph.

3 62. Space Data denies the allegations in this paragraph.

4 **COUNTERCLAIM 8: DECLARATORY JUDGMENT OF**  
5 **INVALIDITY OF U.S. PATENT NO. 9,678,193**

6 63. Space Data incorporates by reference its responses to the allegations of paragraphs  
7 1 through 62 above as its responses to this paragraph.

8 64. The allegations of this paragraph set forth argument and legal conclusions to which  
9 no response is required. To the extent a response is required, Space Data denies the  
10 allegations of this paragraph.

11 65. Space Data admits that it did not invent the idea of using high-altitude balloons for  
12 purposes of communication. Space Data denies that any prior art references, individually  
13 and/or in combination, disclose any of the asserted claims of the '193 Patent. The allegation  
14 that the '193 Patent is anticipated by Knoblach is a legal conclusion to which no response is  
15 required. To the extent a response is required, Space Data denies that the '193 Patent is  
16 anticipated by Knoblach. Space Data denies that Knoblach is prior art to the '193 Patent.  
17 Space Data admits that Knoblach discloses each and every element of the asserted claims of  
18 the '193 Patent. Space Data denies that the asserted claims of the '193 Patent are rendered  
19 obvious by, either alone or in combination with each other, Campbell, Seigsohn I, '090  
20 patent, Carten, POBAL-S, (LeClaire, GAINS Instrumentation, Girz, Gildenburg, Aaron,  
21 Global Aerospace Report, and the AFCRL Report. Space Data denies that Campbell,  
22 Seigsohn I, '090 patent, Carten, POBAL-S, (LeClaire, GAINS Instrumentation, Girz,  
23 Gildenburg, Aaron, Global Aerospace Report, and the AFCRL Report disclose balloon  
24 communications systems as well as horizontal positioning of balloons via altitude control and  
25 relative positioning of balloons within the communications system, as claimed by the '193  
26 Patent. The allegation that Knoblach, in combination with the above references, renders the  
27

1 claims of the '193 patents obvious is a legal conclusion to which no response is required. To  
2 the extent a response is required, Space Data denies that Knoblach, in combination with the  
3 above references, renders the claims of the '193 Patent obvious. Space Data denies that  
4 Exhibit B demonstrates that each of these references anticipates and/or renders obvious,  
5 alone or in combination with the other references, the asserted claims of the '193 Patent. The  
6 remaining allegations of this paragraph are legal conclusions to which no response is  
7 required. To the extent a response is required, Space Data denies the remaining allegations.

8 66. The allegations of this paragraph set forth speculation, argument, and legal  
9 conclusions to which no response is required. To the extent a response is required, Space  
10 Data denies the allegations in this paragraph.

11 67. The allegations of this paragraph set forth argument and legal conclusions to which  
12 no response is required. To the extent a response is required, Space Data denies the  
13 allegations of this paragraph.

14 68. Space Data admits there exists an actual, continuing, justiciable case or controversy  
15 between Google and Space Data as to whether the claims of the '193 Patent listed in Space  
16 Data's Election of Asserted Claims are valid. Space Data denies that there exists an actual,  
17 continuing, justiciable case or controversy between Google and Space Data with respect to  
18 the validity of any other claims of the '193 Patent. Space Data denies that there exists an  
19 actual, continuing, justiciable case or controversy between Space Data and Google as to the  
20 enforceability of any claims of the '193 Patent. Space Data denies any remaining allegations  
21 in this paragraph.

22 69. Space Data denies the allegations in this paragraph.

23 **EXCEPTIONAL CASE**

24 70. Space Data denies that Google is entitled to an award of its attorneys' fees incurred  
25 in connection with defending this action pursuant to 35 U.S.C. § 285. Space Data denies that  
26  
27

1 Google does not infringe any valid or enforceable claim of the Patents-in-Suit. Space Data  
2 denies that the Patents-in-Suit are invalid and/or unenforceable.

3 **PRAYER FOR RELIEF**

4 These paragraphs set forth the statement of relief requested by Google to which no  
5 response is required. Space Data denies any allegations contained in the Prayer for Relief to  
6 which a response is required.

7 Space Data denies each and every allegation of Google's counterclaims not specifically  
8 admitted or otherwise responded to above. Space Data specifically denies that Google is  
9 entitled to a judgment, with prejudice or otherwise, dismissing Space Data's Complaint  
10 against Google. Space Data specifically denies that Google is entitled to a judgment that the  
11 Patents-in-Suit, or any claim thereof, are not infringed, invalid, and unenforceable. Space  
12 Data specifically denies that Google is entitled to an order that it is the "prevailing party"  
13 with respect to Space Data's patent claims. Space Data specifically denies that Google is  
14 entitled to an award granting Google attorney's fees and costs, under law or equity. Space  
15 Data specifically denies that Google is entitled to an order that it is the "prevailing party"  
16 with respect to Space Data's misappropriation of trade secrets and breach of contract claims.  
17 Space Data specifically denies that its misappropriation claims were made in bad faith.  
18 Space Data denies that Google is entitled to any award of reasonable attorney's fees and  
19 costs, including expert witness fees, pursuant to California Civil Code § 3426.4, 18 U.S.C. §  
20 1836(b)(3)(D) or otherwise. Space Data specifically denies that Google is entitled to any  
21 relief whatsoever of any kind against Space Data as a result of any act of Space Data or any  
22 person or entity acting on behalf of Space Data.

23 **AFFIRMATIVE DEFENSES TO COUNTER CLAIMS**

24 Space Data asserts the following affirmative defenses. To the extent any of the defenses,  
25 in whole or in part, relates to or negates an element of Google's claims, Space Data in no  
26 way seeks to relieve Google of its burden of proof or persuasion on that element. All  
27

defenses are pled in the alternative and do not constitute an admission of liability or that Google is entitled to any relief whatsoever. Space Data reserves any and all rights it has under the Federal Rules of Civil Procedure to assert additional defenses and/or counterclaims as additional facts are learned or present themselves during discovery or otherwise during the course of these proceedings.

**First Affirmative Defense – Issue Preclusion and Claim Preclusion**  
**(Counterclaim 8)**

The doctrines of issue preclusion and claim preclusion preclude Google from relitigating the priority date and invalidity of the asserted claims of '193 Patent. On June 1, 2016, Space Data filed an interference (the "Interference") with the Patent Trial and Appeal Board ("PTAB"). During the Interference, Space Data asserted that it was the senior rights holder of Claims 1-12 and 16-24 of Google's 8,820,678 patent (the "'678 Patent"). Space Data moved for judgement that, as senior rights holder of these claims, the claims should be accorded the benefit of priority to Space Data's U.S. Patent Application No. 09/342,440 filed June 29, 1999. Google, through counsel, indicated that it did not intend to contest priority. The PTAB held that "this concession of priority mooted the need" to consider Space Data's motion for Judgment on Priority. The PTAB further held that Google's indication that it "did not intend to contest priority in this case" was "a concession of priority" and entered final judgment that claims 1-12 and 16-24 of Google's '678 Patent should be cancelled in favor of Space Data. Google did not appeal this judgment at the PTAB or in the Federal Courts. The time for such an appeal has passed.

Claim 1 of the '678 Patent thereafter issued as asserted Claim 1 of the '193 Patent. Claim 2 of the '678 patent issued as asserted Claim 2 of the '193 Patent. Claim 9 of the '678 Patent issued as asserted Claim 4 of the '193 Patent. Claim 21 of the '678 Patent was incorporated into asserted Claim 17 of the '193 Patent. Limitations from Claim 1 of the '678 Patent were incorporated into asserted Claim 14 of the '193 Patent.

Google had a full and fair opportunity to litigate the issue of priority date and invalidity of asserted Claims 1, 2, 4, 14, and 17 of the '193 Patent at the PTAB. It chose to concede priority instead. In light of Google's concession on the merits of priority, the PTAB entered final judgment against Google. That judgment can no longer be appealed. Google was identified as the real party-in-interest with respect to the '678 Patent in the Interference. Space Data was also identified as the real party interest.

Space Data has been prejudiced by Google's conduct, including because it could have asked the PTAB, which is staffed by experts with technical expertise, to fully address priority and invalidity of the claims at issue in the Interference.

Google is therefore precluded, under the doctrines of issue preclusion and claim preclusion, from relitigating the issue of priority and invalidity with respect to at least asserted Claims 1, 2, 4, 14, and 17 of the '193 Patent as well as any asserted claims that depend from them. Google had its day in court on these issues with respect to these asserted claims. It had the opportunity to present at the PTAB all the facts and advance all of its arguments on priority and invalidity with respect to these claims. It chose instead to concede.

### **Second Affirmative Defense – Judicial Estoppel (Counterclaim 8)**

Google cannot assert a position in this proceeding that is contrary to or inconsistent with the positions that it has taken and continues to take with respect to certain of the '193 asserted claims at the U.S. Patent and Trademark Office and at other patent issuing entities in foreign countries.

As discussed above, asserted Claims 1, 2, 4, 14, and 17 of the '193 Patent are either identical to, or substantially similar to, certain claims of Google's '678 Patent. During prosecution of the application that resulted in the '678 Patent, the purported inventors of Google's '678 Patent swore that they were aware of their "duty to disclose information which

1 is material to patentability” and assigned the application to Google. The applicants for the  
 2 ’678 Patent submitted Information Disclosure Statements to the PTO disclosing material  
 3 identical to, or not materially different from, the prior art references Google now asserts  
 4 invalidate the asserted claims of the ’193 Patent.

5 The PTO rejected then-pending claims 1, 3, 13, and 26 of the ’678 Patent, among others,  
 6 as being anticipated by Campbell. Google then scheduled an examiner interview, and argued  
 7 that a claims amendment would overcome the rejection. The PTO tentatively agreed and  
 8 asked that Google submit the amended claims with a detailed explanation of why the  
 9 claims—as amended—overcame Campbell.

10 Google then amended then-pending claims 1 and 3 as follows:

- 11 1. (Currently Amended) A method comprising:  
 12 determining a location of a target balloon;  
 13 determining locations of one or more neighbor balloons relative to  
 14 the determined location of the target balloon, wherein the target  
 15 balloon comprises a communication system that is operable for  
 16 data communication with at least one of the one or more neighbor  
 17 balloons;  
 18 determining a desired movement of the target balloon based on the  
 19 determined locations of the one or more neighbor balloons relative  
 20 to the determined location of the target balloon, wherein the  
 21 desired movement of the target balloon comprises a desired  
 22 horizontal movement of the target balloon; and  
 23 controlling the target balloon based on the desired movement of  
 24 the target balloon, wherein controlling the target balloon based on  
 25 the desired movement of the target balloon comprises controlling  
 26 an altitude of the target balloon based on the desired horizontal



1           movement of the target balloon.

2           3.       (Currently Amended) The method of claim [[2]] 1, wherein  
3           controlling the altitude of the target balloon based on the desired  
4           horizontal movement of the target balloon comprises:  
5           determining that the desired horizontal movement of the target  
6           balloon can be achieved by exposing the target balloon to ambient  
7           winds of a particular velocity;  
8           determining that ambient winds of the particular velocity are likely  
9           to be available at a particular altitude; and  
10          adjusting the altitude of the target balloon to attain the particular altitude.

11          Google argued to the PTO that the idea of controlling internet balloons by moving them  
12          vertically to catch microwinds to move as desired horizontally, all as part of a coherent  
13          balloon-borne internet constellation, was manifestly novel and not anticipated. Specifically,  
14          Google argued to the PTO:

15               In rejecting claim 2, the Examiner alleged that Campbell discloses  
16               “wherein controlling the target balloon based on the desired  
17               movement of the target balloon comprises controlling an altitude  
18               of the target balloon based on the desired horizontal movement of  
19               the target balloon.” *See* Office Action, pp. 3-4. Applicant submits,  
20               however, that Campbell includes no such disclosure. Thus, the  
21               feature of “controlling an altitude of the target balloon based on the  
22               desired horizontal movement of the target balloon,” as recited in  
23               amended claim 1, and the feature of “control an altitude of the  
24               balloon based on the desired horizontal movement of the balloon,”  
25               recited in amended claim 26, clearly distinguish over Campbell.

1 Accordingly, Applicant submits that claims 1 and 26, as amended, are  
2 allowable over Campbell for at least the foregoing reasons. Applicant  
3 further submits that claims 3-5, 7-22, 26, 28 and 30-31 are allowable for at  
4 least the reason that they form allowable independent claims.

5 The PTO accepted Google's position and then-pending claims 1, 3, 5, and 26 of the  
6 application thereafter issued as Claims 1, 2, 9, and 21 of '678 Patent. Priority to these claims  
7 was later awarded to Space Data and asserted Claims 1, 2, 4, 14, and 17 of the '193 Patent  
8 are either identical to, or substantially similar to, Claims 1, 2, 9, and 21 of Google's '678  
9 Patent.

10 In addition to doing so in the U.S., Google has prosecuted and argued that claims  
11 identical to, substantially similar to, or incorporating Claims 1, 2, 9, and 21 of the '678 Patent  
12 are valid in foreign jurisdictions around the world, including in at least the EU, Brazil, China,  
13 Canada, and Australia.

14 Google has enjoyed the benefit of exclusivity of these claims after telling patent offices  
15 around the world the claims are valid. It should be estopped from arguing otherwise in this  
16 case.

17 **Third Affirmative Defense – Waiver, Acquiescence, Ratification, or Consent**  
18 **(Counterclaim 8)**

19 Google's claims and the relief sought by Google are barred, in whole or in part, by the  
20 equitable doctrines of acquiescence, waiver, ratification, or consent. On June 1, 2016, Space  
21 Data filed an interference (the "Interference") with the Patent Trial and Appeal Board  
22 ("PTAB"). During the Interference, Space Data asserted that it was the senior rights holder  
23 of Claims 1-12 and 16-24 of Google's 8,820,678 patent (the "'678 Patent"). Space Data  
24 moved for judgement that, as senior rights holder of these claims, the claims should be  
25 accorded the benefit of priority to Space Data's U.S. Patent Application No. 09/342,440 filed  
26 June 29, 1999. Google therefore knew that the issue of whether the claims 1-12 and 16-24 of  
27

1 Google's '678 Patent should be accorded the benefit of priority to Space Data's U.S. Patent  
2 Application No. 09/342,440, filed June 20, 1999, was at issue in the Interference. Google,  
3 through counsel, indicated that it did not intend to contest priority. The PTAB held that "this  
4 concession of priority mooted the need" to consider Space Data's motion for Judgment on  
5 Priority. The PTAB further held that Google's indication that it "did not intend to contest  
6 priority in this case" was "a concession of priority" and entered final judgment that Claims 1-  
7 12 and 16-24 of Google's '678 Patent should be cancelled in favor of Space Data. Google  
8 did not appeal this judgment at the PTAB or in Federal Courts. The time for such an appeal  
9 has passed.

10 Claim 1 of the '678 Patent thereafter issued as asserted Claim 1 of the '193 Patent.  
11 Claim 2 of the '678 patent issued as asserted Claim 2 of the '193 Patent. Claim 9 of the '678  
12 Patent issued as asserted Claim 4 of the '193 Patent. Claim 21 of the '678 Patent was  
13 incorporated into asserted Claim 17 of the '193 Patent. Limitations from Claim 1 of the '678  
14 Patent were incorporated into asserted Claim 14 of the '193 Patent.

15 Google had a full and fair opportunity to litigate the issue of priority date and invalidity  
16 of asserted Claims 1, 2, 4, 14, and 17 of the '193 Patent at the PTAB. It chose to concede  
17 priority instead. In light of Google's concession on the merits of priority, the PTAB entered  
18 final judgment against Google. That judgment can no longer be appealed. Google was  
19 identified as the real party-in-interest with respect to the '678 Patent in the Interference.  
20 Space Data was also identified as the real party interest.

21 Space Data has been prejudiced by Google's conduct, including because it could have  
22 asked the PTAB, which is staffed by experts with technical expertise, to fully address priority  
23 and invalidity of the claims at issue in the Interference.

24 Google is therefore precluded, under by the equitable doctrines of acquiescence, waiver,  
25 ratification, or consent, from relitigating the issue of priority and invalidity with respect to at  
26 least asserted Claims 1, 2, 4, 14, and 17 of the '193 Patent as well as any asserted claims that  
27

depend from them. Google consented and acquiesced to judgment on priority. In addition, Google cannot now raise any “issue[ ] that w[as], or by motion could have properly been, raised and decided” during the Interference, including the validity of the claims at issue during the Interference. *See* 37 C.F.R. § 41.127. Google has therefore waived arguments as to invalidity with respect to at least asserted Claims 1, 2, 4, 14, and 17 of the ’193 Patent as well as any asserted claims that depend from them.

**Fourth Affirmative Defense – Failure to State a Claim**  
**(Counterclaims 2, 4, 6, and 8)**

Google purports to demand a “judgment finding that every asserted claim of the” ’941, ’193, ’503, and ’706 Patents are “unenforceable.” *See* Google’s Counterclaims at ¶¶ 28, 42, 56, 69, and Prayer for Relief. Google’s Counterclaims for unenforceability are naked legal conclusions devoid of any factual enhancement whatsoever. Google’s Counterclaims for unenforceability therefore fail to state a claim upon which relief may be granted.

**Fifth Affirmative Defense – Lack of Subject Matter Jurisdiction**  
**(All Counterclaims)**

Google purports to demand “a judgment finding that the” entirety of the ’941, ’193, ’503, and ’706 Patents are “not infringed by any of Google’s products or services.” *See* Google’s Counterclaims at ¶¶ 18, 34, 48, 62, and 70. Google’s infringement of claims of the ’941, ’193, ’503, and ’706 Patents other than those listed in Space Data’s Election of Asserted Claims are not at issue in this case. The Court therefore lacks jurisdiction over Google’s counterclaims for non-infringement to the extent Google seeks judgment that it does not infringe claims of the ’941, ’193, ’503, and ’706 Patents other than those listed in Space Data’s Election of Asserted Claims.

Google also purports to demand a judgment that the ’941, ’193, ’503, and ’706 Patents are “not infringed by *any of Google’s products or services.*” *See* Google’s Counterclaims at ¶¶ 18, 34, 48, and 61. Infringement of Google’s products and services, other than those

1 products and services identified in Space Data's Disclosures of Asserted Claims and  
 2 Infringement Contentions, are not at issue in this case. The Court therefore lacks jurisdiction  
 3 over Google's Counterclaims for non-infringement to the extent Google seeks judgment that  
 4 its products and services, other than those identified in Space Data's Disclosures of Asserted  
 5 Claims and Infringement Contentions, do not infringe the '941, '193, '503, and '706 Patents.

6 Google purports to demand a "judgement that the Patents-in-Suit . . . are invalid." *See*  
 7 Google's Counterclaims at Prayer for Relief. Validity of the claims of the '941, '706, '503,  
 8 and '193 Patents, other than those listed in Space Data's Election of Asserted Claims, are not  
 9 at issue in this case. The Court therefore lacks jurisdiction over Google's Counterclaims for  
 10 invalidity to the extent Google seeks judgment that claims other than those listed in Space  
 11 Data's Election of Asserted Claims are invalid.

#### 12 **PRAYER FOR RELIEF**

13 WHEREFORE, Space Data requests entry of judgment in its favor and against Google  
 14 as follows:

- 15 a. For a judgment dismissing Google's counterclaims against Space Data
- 16 with prejudice; and
- 17 b. Any other and further relief that this Court may deem proper and just.

18 Dated: September 20, 2018

Respectfully submitted,

19 /s/ Spencer Hosie

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